



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,599	08/28/2001	Yasuhiro Kawaguchi	396.28283CP4	3278
22850	7590	04/10/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MCAVOY, ELLEN M	
			ART UNIT	PAPER NUMBER
			1764	
DATE MAILED: 04/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/939,599	Applicant(s) KAWAGUCHI ET AL.	
	Examiner Ellen M. McAvoy	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 07/502,872.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/28/2001</u> . | 6) <input type="checkbox"/> Other: ____. |

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3-5, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,475,405 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of effecting lubrication in compression-type refrigerators using a hydrogen-containing fluorocarbon refrigerant and the polyoxyalkylene glycol lubricant oil; and the compression-type refrigerator system which comprises a compressor, a refrigerant and the polyoxyalkylene glycol lubricant oil; may be the same.

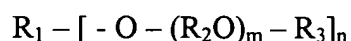
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al (4,267,064) and Uchinuma et al (4,248,726).

Sasaki et al ["Sasaki"] disclose oil compositions for use in the lubrication of rotary-type compressors for refrigeration equipment which comprises a polyglycol oil blended with specific amounts of at least one additive. The polyglycol oil has a kinetic viscosity in the range of 25-50 cSt at 98.9°C and is represented by the formula



wherein R_1 and R_3 are each a hydrogen atom, a hydrocarbon radical containing 1-20 carbon atoms including methyl, or an acyl group, and may be identical with, or different from, each other; R_2 is an alkylene group; n is an interger of 1-6; and $(m \times n)$ is 2 or greater. See column 2, lines 15-45. The alkylene group represented by R_2 includes ethylene, propylene, polyoxypropylene and polyoxyethylene-polyoxypropylene groups. The examiner is of the position that the polyglycol oil of Sasaki meets the limitations of the polyoxyalkylene glycol derivative represented by the general formula $R^6-O-A-R^7$ of the claims. Although the requirements of $0.01 < p/q < 10$, and $5 < p + q < 100$ are not specifically set forth in Sasaki, the prior art allows for polyoxyethylene-polyoxypropylene groups which satisfies the first equation,

and the prior art teaches that when n is 1, m is 2 *or greater* which satisfies the second equation. Sasaki also teaches that the oil compositions are suited to application in refrigeration compressors wherein halogen-containing refrigerants are used. See column 4, lines 26-35. In Table 1, Examples 4 and 5 contain oil compositions comprising polyoxypropylene glycol monoether and polyoxyethylene-oxypropylene glycol monoether in the same composition which meets the limitation of claim 6 which contains the same two types of oils. Thus, the examiner is of the position that Sasaki meets the limitations of the above rejected claims.

Uchinuma et al ["Uchinuma"] discloses the same type of polyglycol oils for use in the lubrication of rotary-type compressors for refrigeration equipment, but the oils have a higher kinematic viscosity of from 50-200 cSt at 98.9°C. See column 2, line 51 to column 3, line 45. Thus, since most of the claims do not cite a kinematic viscosity of the base oil, and the kinematic viscosity at 100°C in claims 6 and 7 is 2 to 50 cSt, the examiner is of the position that Uchinuma also meets the limitations of the above rejected claims.

Claim Rejections - 35 USC § 103

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK Patent Application 2,121,818 A.

The UK Patent Application (hereafter UK '818) teaches a polyglycol fluid having the formula $RO - (CH_2 - CHR' - O)_x - R''$ wherein R and R'' are hydrogen or C_1 to C_4 alkyl groups, R' is hydrogen or a C_1 to C_4 alkyl group, and x is at least 15, and preferably lower than 150, more preferably x is 25-100. See page 1, lines 28-36. The polyglycol is preferably a copolymer

of ethylene oxide and propylene oxide, preferably in a molar ratio of about 50/50, x being between 40 and 50. See page 1, lines 45-48. Suitable molecular weights are between 1000 and 7000, preferably between 2000 and 2500; and suitable viscosities are between 100 and 2000 cS at 38°C, preferably between 125 and 250 cS at 38°C. The examiner is of the position that the polyglycol fluid of UK '818 meets the limitation of the polyoxyalkyleneglycol derivative of claim 1 when it is represented by the general formula $R^6 - O - A - R^7$. While UK '818 does not disclose polyoxyalkyleneglycol derivatives wherein R, R' and R'' are methyl, the prior art specifically teaches that R, R' and R'' may be methyl. Accordingly, the claimed lubricating oil would have been obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

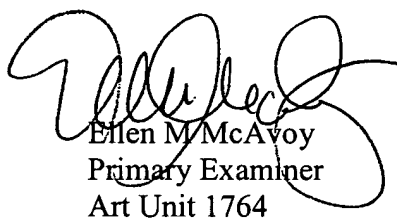
Three "foreign patent documents" and two "other documents" cited on PTO-1449 have not been located and, thus, have not been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1764

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ellen M. McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
March 30, 2006